

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/021508

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B29C37/00 B29C45/37 B29C33/42 G11B23/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B29C G11B B41M B42D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 722 693 A (WICKER KENNETH M) 3 March 1998 (1998-03-03) column 1, lines 55-61; claims 16,17; figures	1,2,14
X	US 5 608 718 A (SCHIEWE HILMAR) 4 March 1997 (1997-03-04)	1,3,4,8, 10-14
Y	column 1, line 53 - column 2, line 48; figure 2 column 4, lines 27-53; claim 5	5
Y	WO 03/000483 A (SPAETH BERND) 3 January 2003 (2003-01-03) page 56, lines 25-34; figure 3c page 76, line 29 - page 77, line 2	5
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

T later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the International search 8 December 2004	Date of mailing of the International search report 21/12/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel: (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016	Authorized officer Mathey, X

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/021508

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 277 827 A (TAIYO YUDEN KK) 9 November 1994 (1994-11-09)	1, 4-8, 10-14
Y	page 2, lines 1,2; figures page 2, line 23 - page 6, line 23	9
Y	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 06, 30 June 1997 (1997-06-30) & JP 09 039042 A (APIC YAMADA KK), 10 February 1997 (1997-02-10) abstract; figures	9
X	PATENT ABSTRACTS OF JAPAN vol. 018, no. 220 (M-1595), 20 April 1994 (1994-04-20) & JP 06 015991 A (CANON INC), 25 January 1994 (1994-01-25) abstract; figures	1, 10, 14
X	US 5 189 531 A (TAYLOR BARRY J ET AL) 23 February 1993 (1993-02-23) column 2, lines 45-57; claims 2,11; figures	1, 10-14
X	TW 519 519 B (CHEN WEN-KUEI) 1 February 2003 (2003-02-01) abstract	14
X	US 5 607 188 A (BAHNS TED L ET AL) 4 March 1997 (1997-03-04) the whole document	1, 3, 4, 8, 10-14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2004/021508

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5722693	A	03-03-1998	NONE		
US 5608718	A	04-03-1997	DE AT AU AU BR CA CN CZ DE WO EP ES GR HK HU JP PL RU SG	4311683 A1 176735 T 671740 B2 6504994 A 9404394 A 2135279 A1 1103539 A ,B 9402745 A3 59407795 D1 9424665 A1 0645042 A1 2130414 T3 3029481 T3 1008706 A1 72804 A2 7507899 T 305803 A1 2124764 C1 44688 A1	13-10-1994 15-02-1999 05-09-1996 08-11-1994 15-06-1999 09-10-1994 07-06-1995 13-12-1995 25-03-1999 27-10-1994 29-03-1995 01-07-1999 28-05-1999 24-03-2000 28-05-1996 31-08-1995 06-02-1995 10-01-1999 19-12-1997
WO 03000483	A	03-01-2003	DE DE CA WO DE EP	10130392 A1 10144259 A1 2456251 A1 03000483 A1 10292713 D2 1404508 A1	09-01-2003 27-03-2003 03-01-2003 03-01-2003 05-08-2004 07-04-2004
GB 2277827	A	09-11-1994	JP JP GB US US	3109866 B2 5006576 A 2250626 A ,B 5498509 A 5398231 A	20-11-2000 14-01-1993 10-06-1992 12-03-1996 14-03-1995
JP 09039042	A	10-02-1997	JP	3448401 B2	22-09-2003
JP 06015991	A	25-01-1994	NONE		
US 5189531	A	23-02-1993	CA DK EP JP WO	2000532 A1 145390 A 0401319 A1 3503811 T 9004812 A1	17-04-1990 24-07-1990 12-12-1990 22-08-1991 03-05-1990
TW 519519	B	01-02-2003	NONE		
US 5607188	A	04-03-1997	DE DE EP JP WO	69508083 D1 69508083 T2 0766864 A1 10502203 T 9600446 A1	08-04-1999 28-10-1999 09-04-1997 24-02-1998 04-01-1996



Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.